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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,761	10/19/2004	Robert Parker	259601US0PCT	6720
22850 ORI ON SPIN	7590 05/04/200 /AK MCCLELLAND	7 MAIER & NEUSTADT, P.C.	EXAMINER	
1940 DUKE S	TREET	BALASUBRAMANIAN, VENKATARAMAN		
ALEXANDRI	A, VA 22314		ART UNIT PAPER NUMBER	
			1624	
		•	NOTIFICATION DATE	DELIVERY MODE
			05/04/2007	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application No.	Applicant(s)		
		10/511,761	PARKER ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Venkataraman Balasubramanian	1624		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address		
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status	,				
1)⊠	Responsive to communication(s) filed on 19 O	<u>ctober 2004</u> .			
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.		
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed. Claim(s) 1-11 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	vn from consideration.			
Applicat	ion Papers				
•	The specification is objected to by the Examine The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the	epted or b) objected to by the td drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).		
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex		•		
Priority (	under 35 U.S.C. § 119				
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority document:  2. Certified copies of the priority document:  3. Copies of the certified copies of the priority application from the International Bureausee the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage		
Attachmen		<b>∧</b> □ <b>-</b>	(DTO 442)		
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date 10/19/2004.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ate		

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#### **DETAILED ACTION**

The preliminary amendment, which included amendment to claims 2 and 4-11, filed on 10/19/2004, is made of record. Claims 1-11 are now pending.

#### Information Disclosure Statement

References cited in the Information Disclosure Statement, filed on 10/19/2004, are made of record.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Recitation of "compounds" in claim 1 renders claim 1 and its dependent claims 2-11 indefinite as it is not clear whether the process is meant to be for a mixture of compounds of formula I or for a single compound. Replacement of "compounds" with 'compound" is suggested.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for compound of formula I wherein Y is phenyl and X is phenyl with COOH groups using copper compound, does not reasonably provide

enablement for compound of formula I wherein the X and Y are various groups with various substituents using any metal compound as embraced in claim 1. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The following apply:

In evaluating the enablement question, following factors are considered. Note In re Wands, 8 USPQ2d 1400 and Ex parte Forman, 230 USPQ 546. The factors include:

1) The nature of the invention, 2) the state of the prior art, 3) the predictability or lack thereof in the art, 4) the amount of direction or guidance present, 5) the presence or absence of working examples, 6) the breadth of the claims, and 7) the quantity of experimentation needed.

1. The nature of the invention and the state of the prior art:

The invention is drawn to a process of making compound of formula I by reacting compound of formula la with compound of formula Ib in presence of metal compound under microwave energy. The X and Y variables and organic radical and metal compound used include any metal compound for both of which there is no enabling disclosure in the specification. As recited X and Y can be any radical with reactive substituents. Specification is not adequately enabled as to how to make compounds of formula (I) wherein the said X and Y are any organic radical. See claim 5 for several choices. In addition, the specification is not adequately enabled for any metal compound.

2. The predictability or lack thereof in the art:

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Hence the process as applied to the above-mentioned compounds claimed by the applicant is not an art-recognized process and hence there should be adequate enabling disclosure in the specification with working example(s).

#### 3. The amount of direction or guidance present:

Examples illustrated in the experimental section or written description offer no guidance or teachings as to how perform the process of making compound of Formula I wherein X is phenyl, Y is phenyl.

## 5. The presence or absence of working examples:

Although examples in the specification show the process, they are limited to X is phenyl, Y is phenyl with copper compound. There are no representative examples showing the viability of the process for X and Y are any radical with various substituents and metal compound embraced in the instant claims.

#### 6. The breadth of the claims:

Specification has no support, as noted above, for all compounds generically embraced in the claim language would lead to desired compound of formula I with said process and there is also no valid chemical reasoning for one trained in the art to expect that one can arrive at a compound wherein X and Y any radical with any substituents.

## 7. The quantity of experimentation needed:

The quantity of experimentation needed would be an undue burden on skilled art in the chemical art since there is inadequate guidance given to the skilled artisan for the many reasons stated above. Even with the undue burden of experimentation, there is

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no guarantee that one would get the product of desired structure, namely compound of formula I embraced in the instant claims.

Thus, factors such as "sufficient working examples", the "level of skill in the art and predictability, etc. have been demonstrated to be sufficiently lacking in the case for the instant claims.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al., J. Chem. Research (S), 536-537,2000.

Wang et al., copper catalysed cross coupling of alkynes under microwave irradiation which includes instant process and compounds. See entire document.

### Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300. Any

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inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the

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Center (EBC) at 866-2 17-9197 (toll-free).

Venkataraman Balasubramanian

4/30/2007